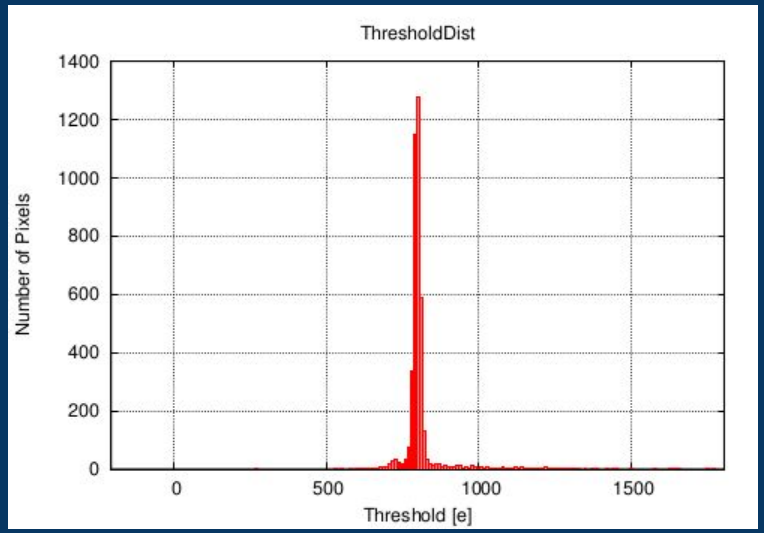
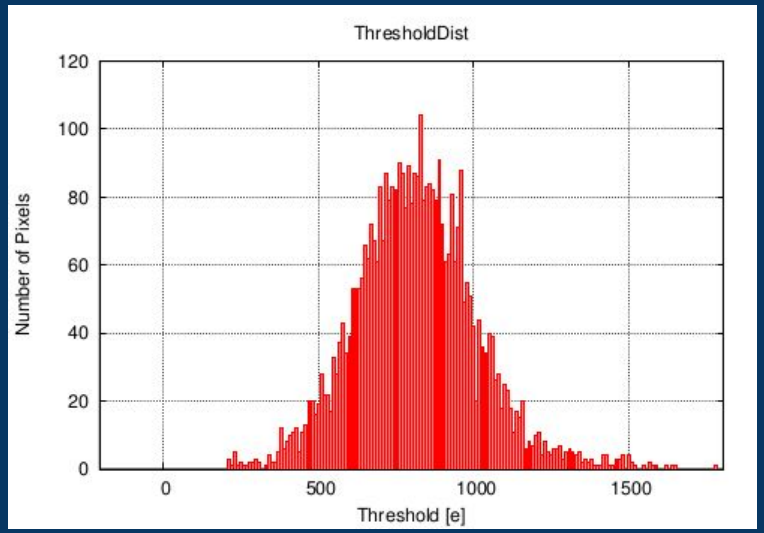
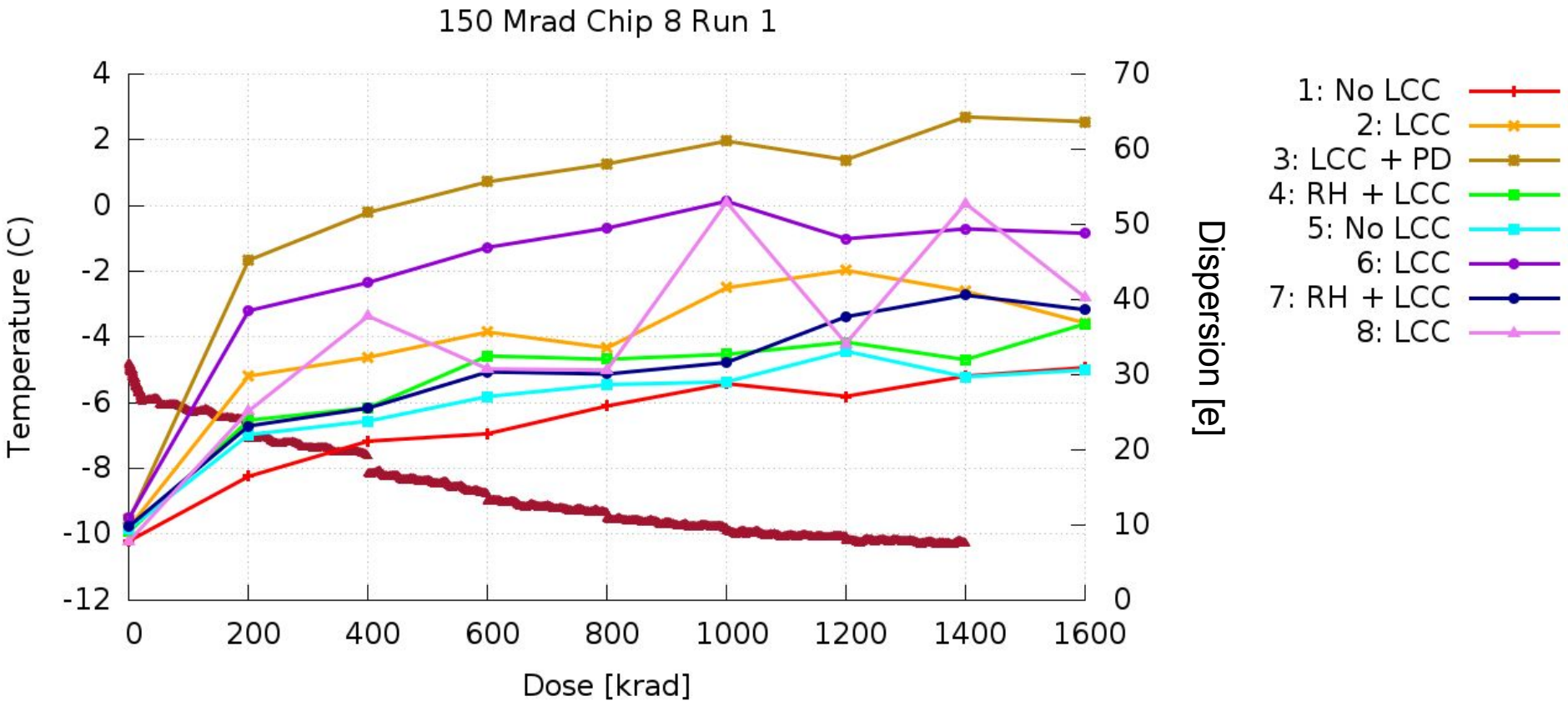
Threshold Dispersion of Irradiated FE65-P2

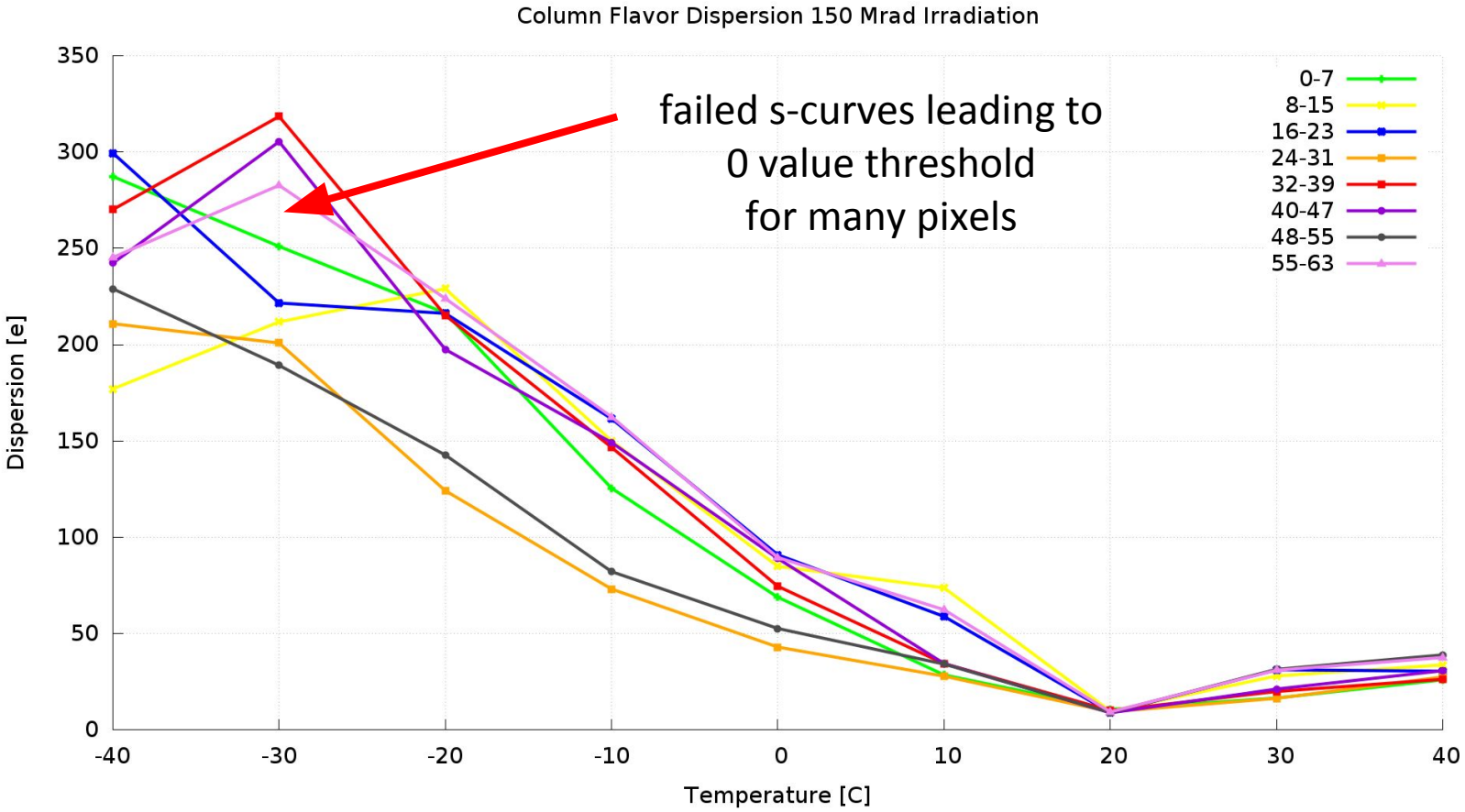




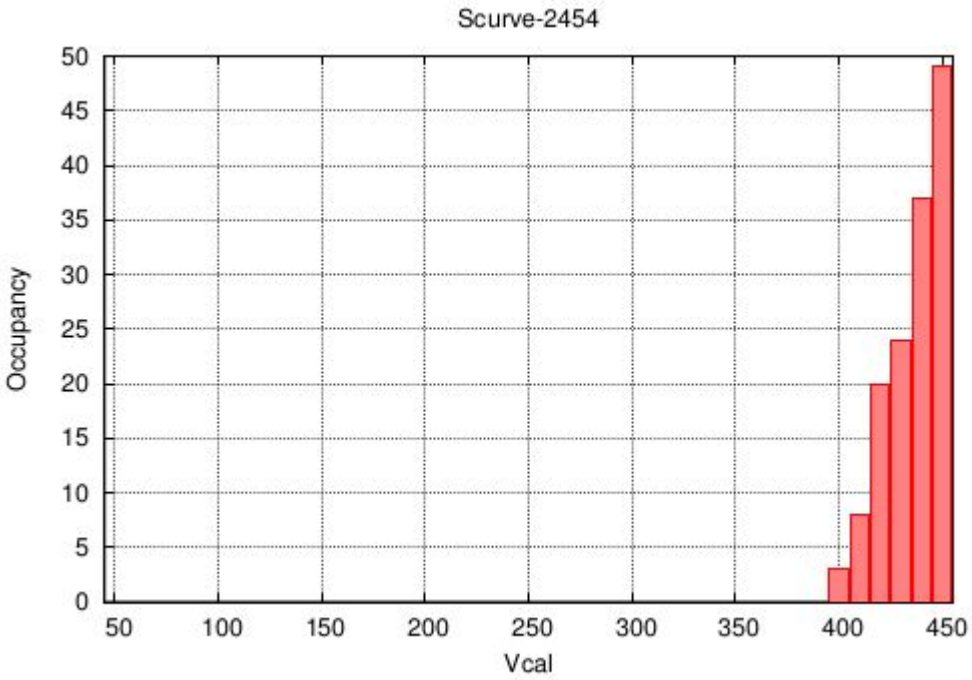
88” Cyclotron Irradiation



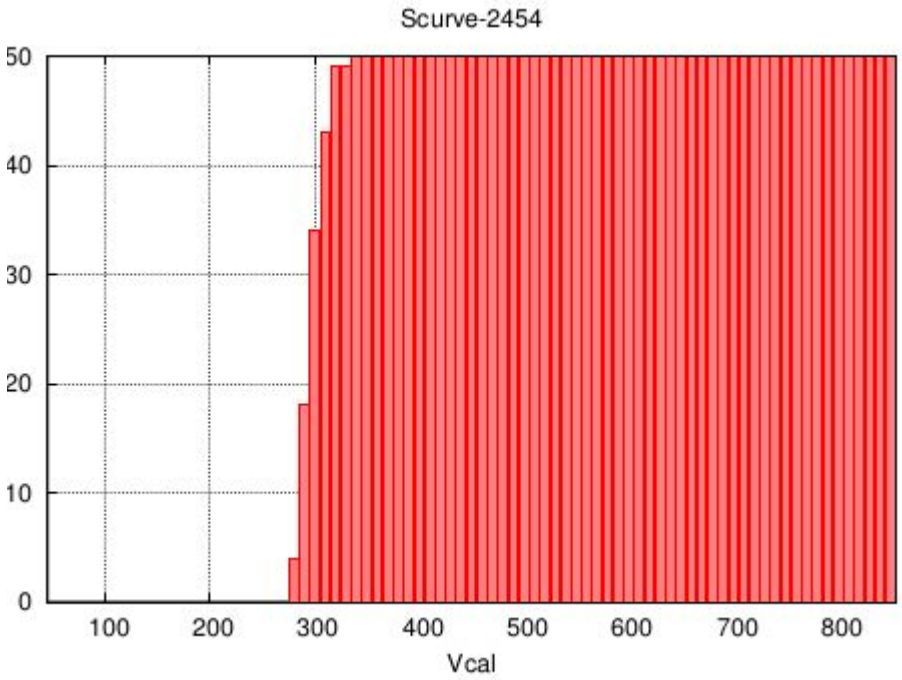
Dispersion vs. Temperature: Previous Data



High Vcal

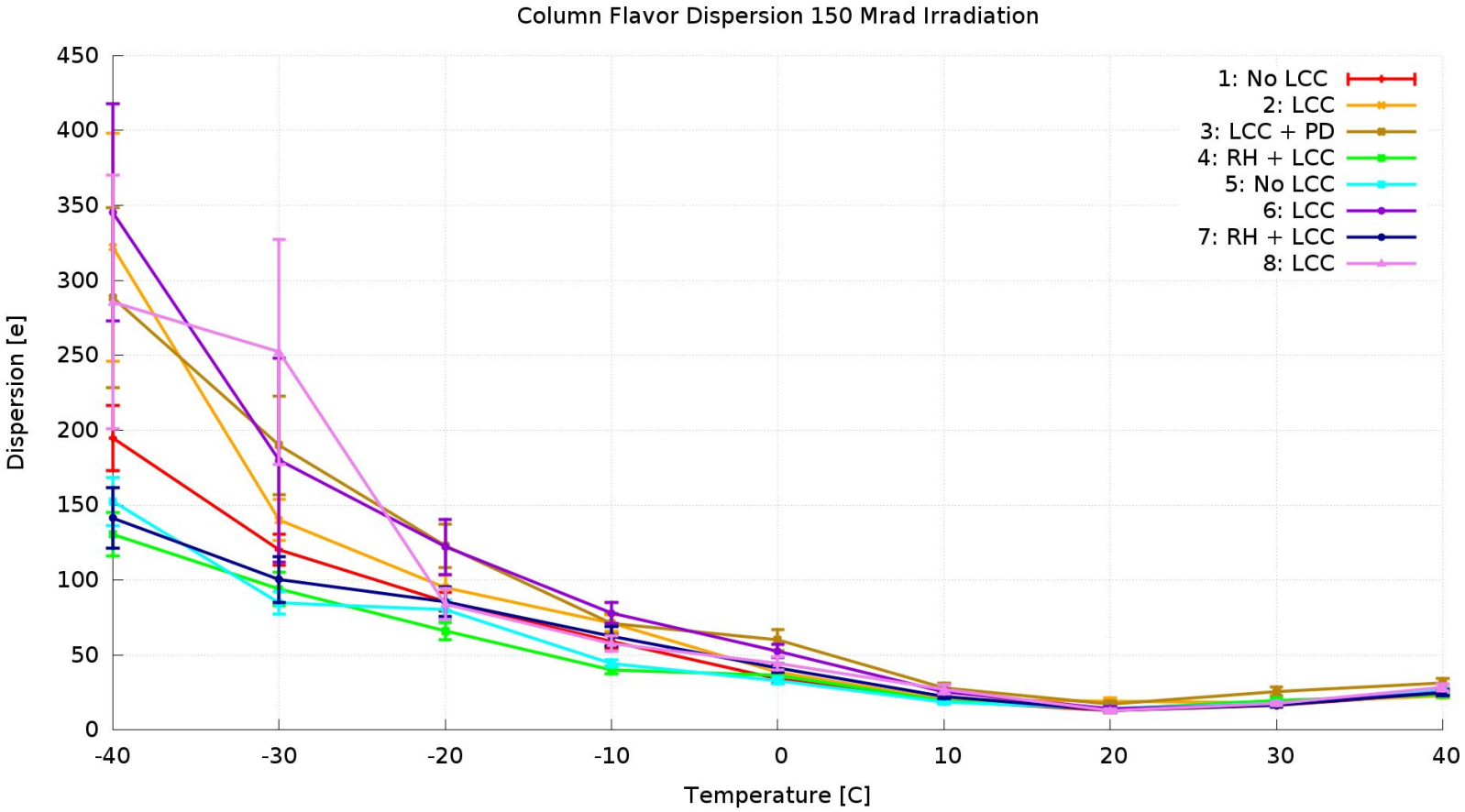


Vcal range 55--450

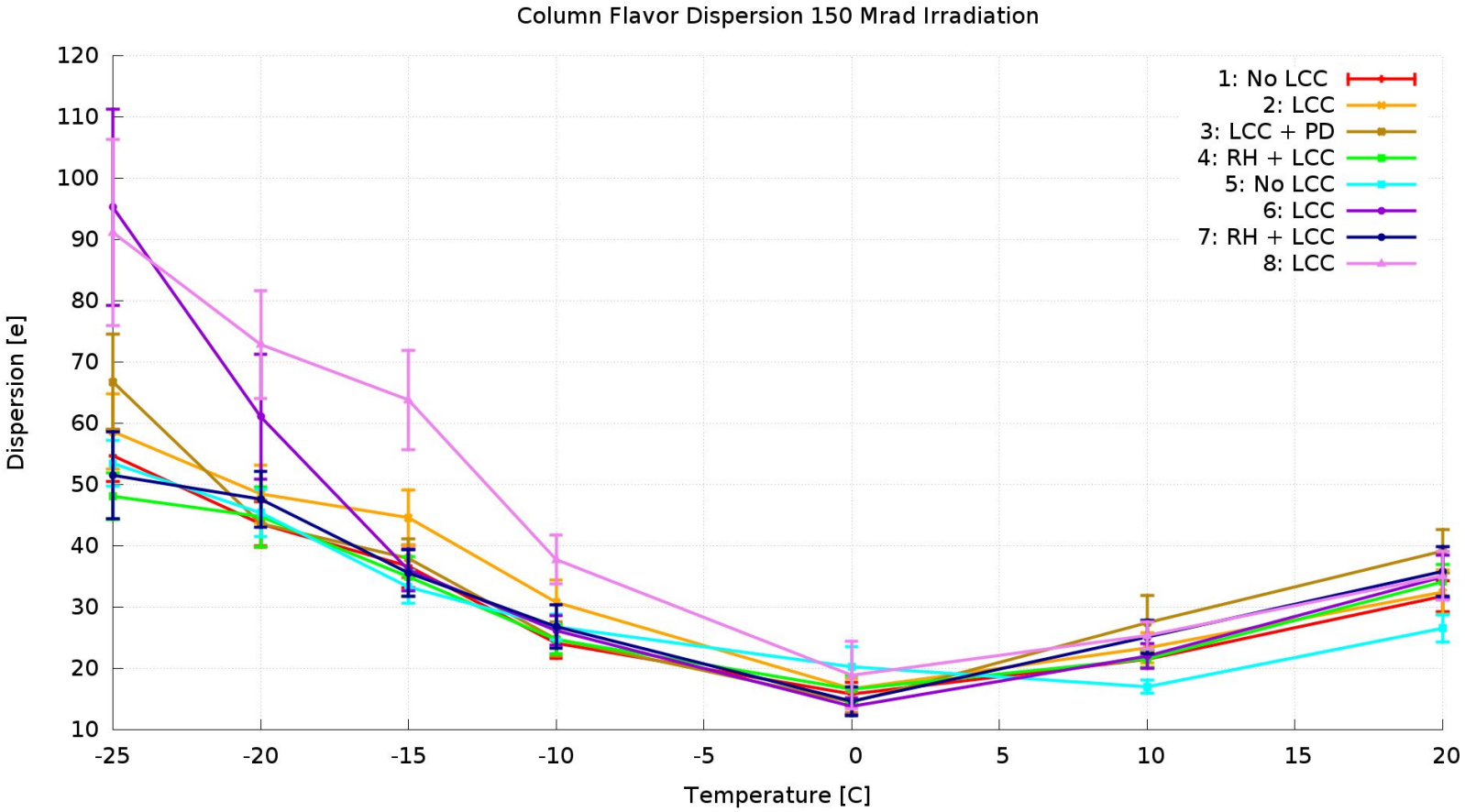


Vcal range 55--850

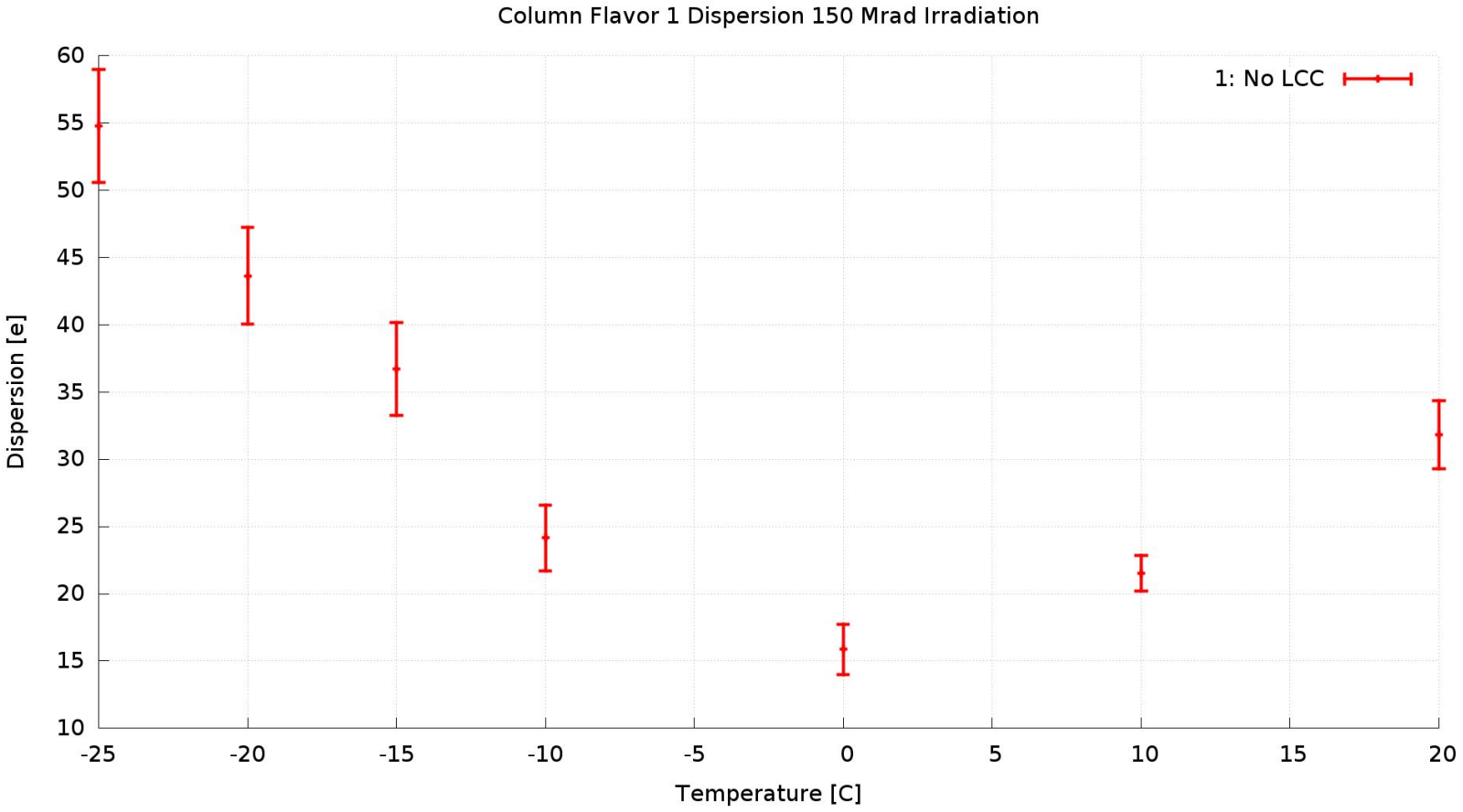
Dispersion vs. Temperature: Room Temperature Tuning



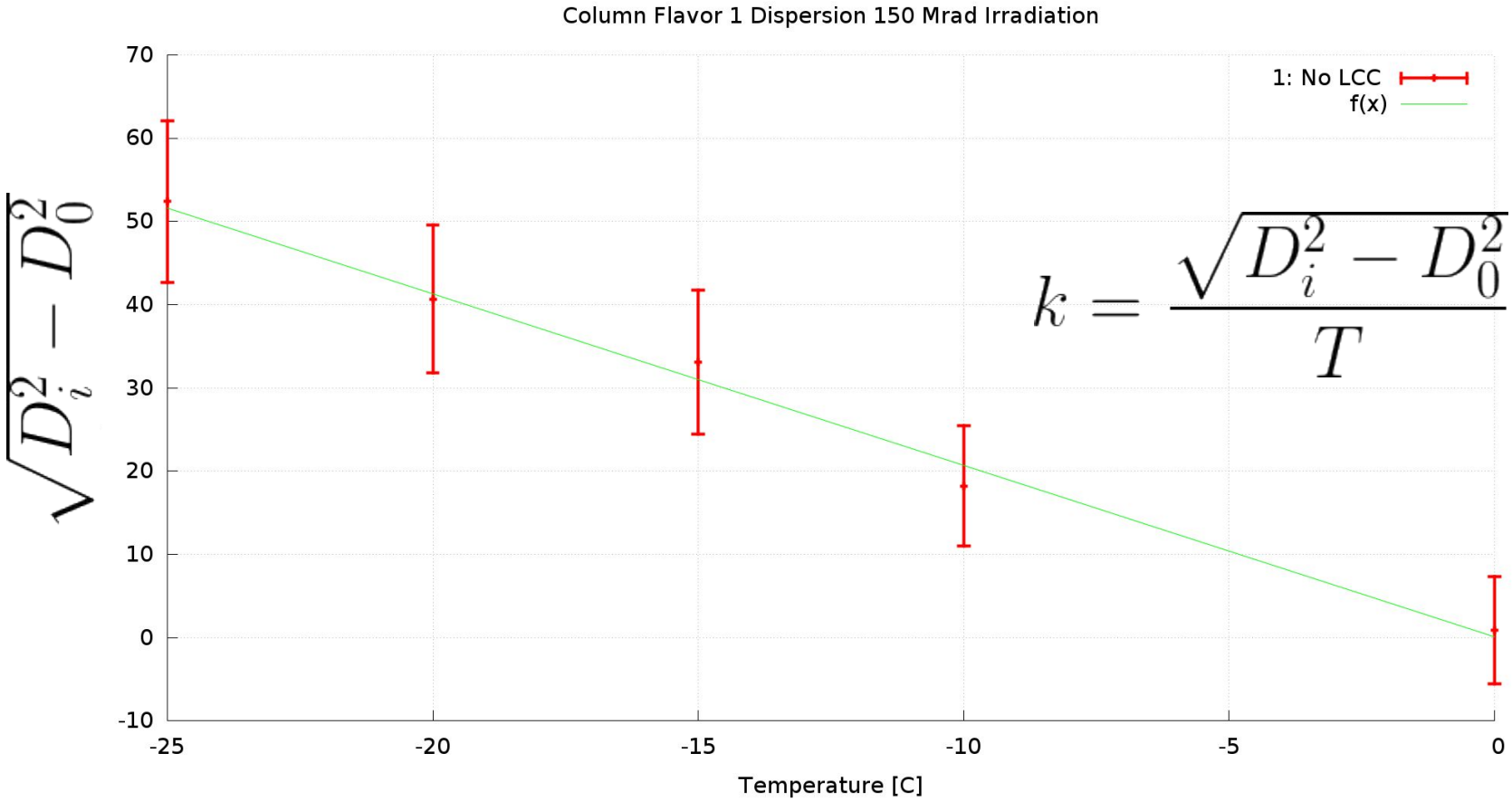
Dispersion vs. Temperature: 0°C Tuning



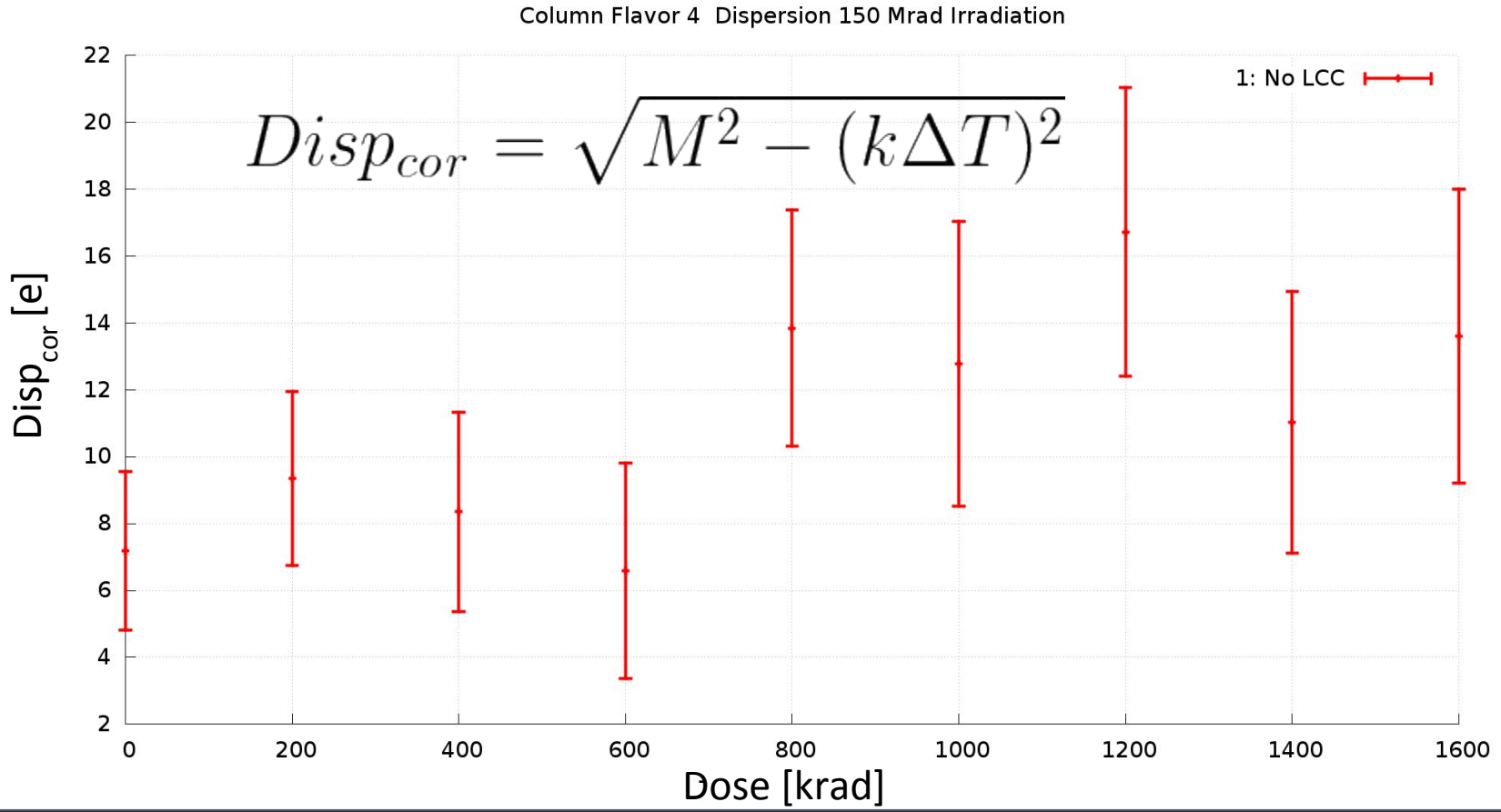
Dispersion vs. Temperature Column Flavor 1



Rate of Dispersion: Column Flavor 1



Corrected Dispersion: Column Flavor 1 (No LCC)



$$k = \frac{\sqrt{D_i^2 - D_0^2}}{T}$$

$$\delta D_i^2 = \sqrt{(\frac{\delta D_i}{D_i})^2 + (\frac{\delta D_i}{D_i})^2}$$

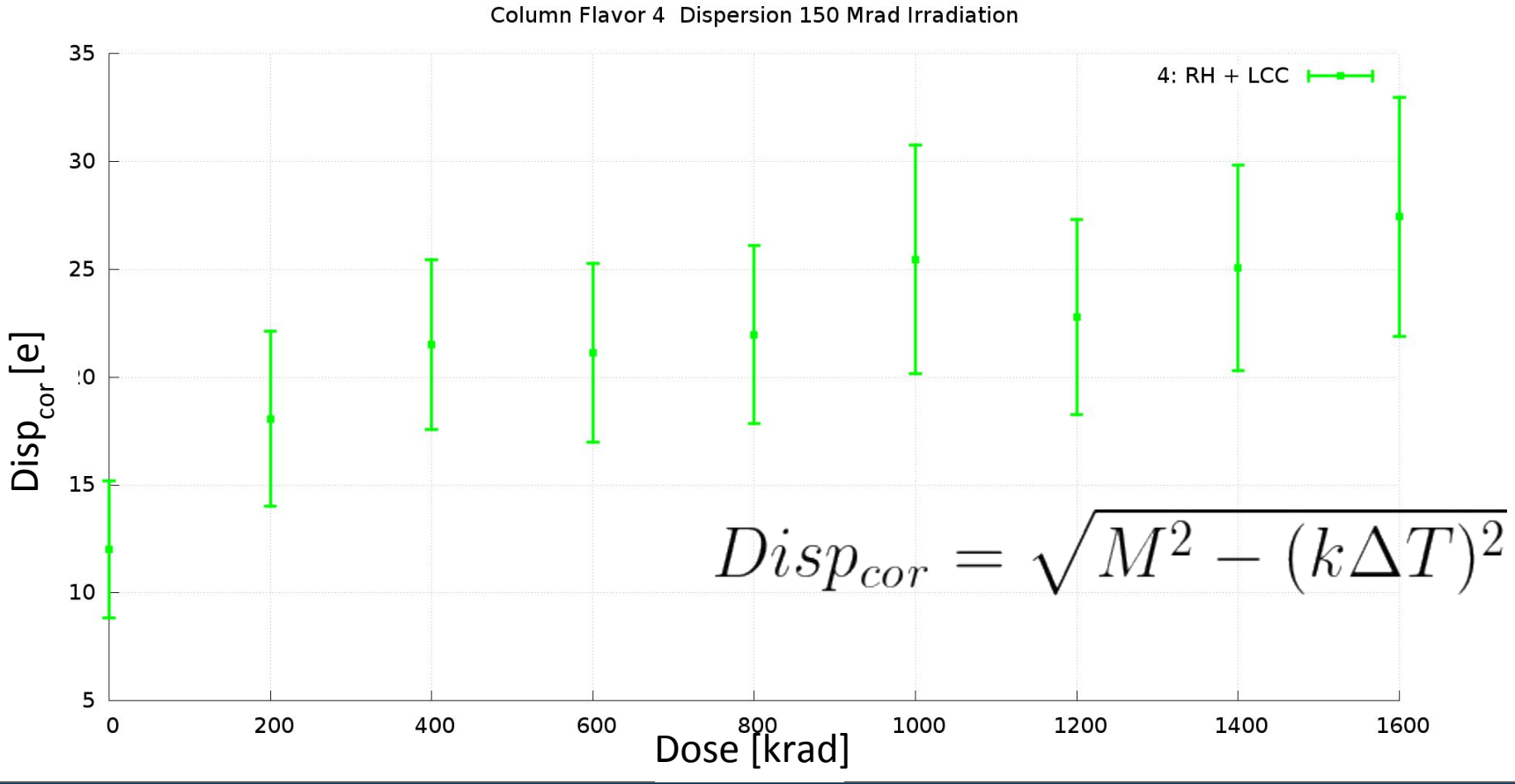
$$\delta D_0^2 = \sqrt{(\frac{\delta D_0}{D_0})^2 + (\frac{\delta D_0}{D_0})^2}$$

$$\delta k = \delta D_i^2 + \delta D_0^2$$

$$Disp_{cor} = \sqrt{M^2 - (k\Delta T)^2}$$

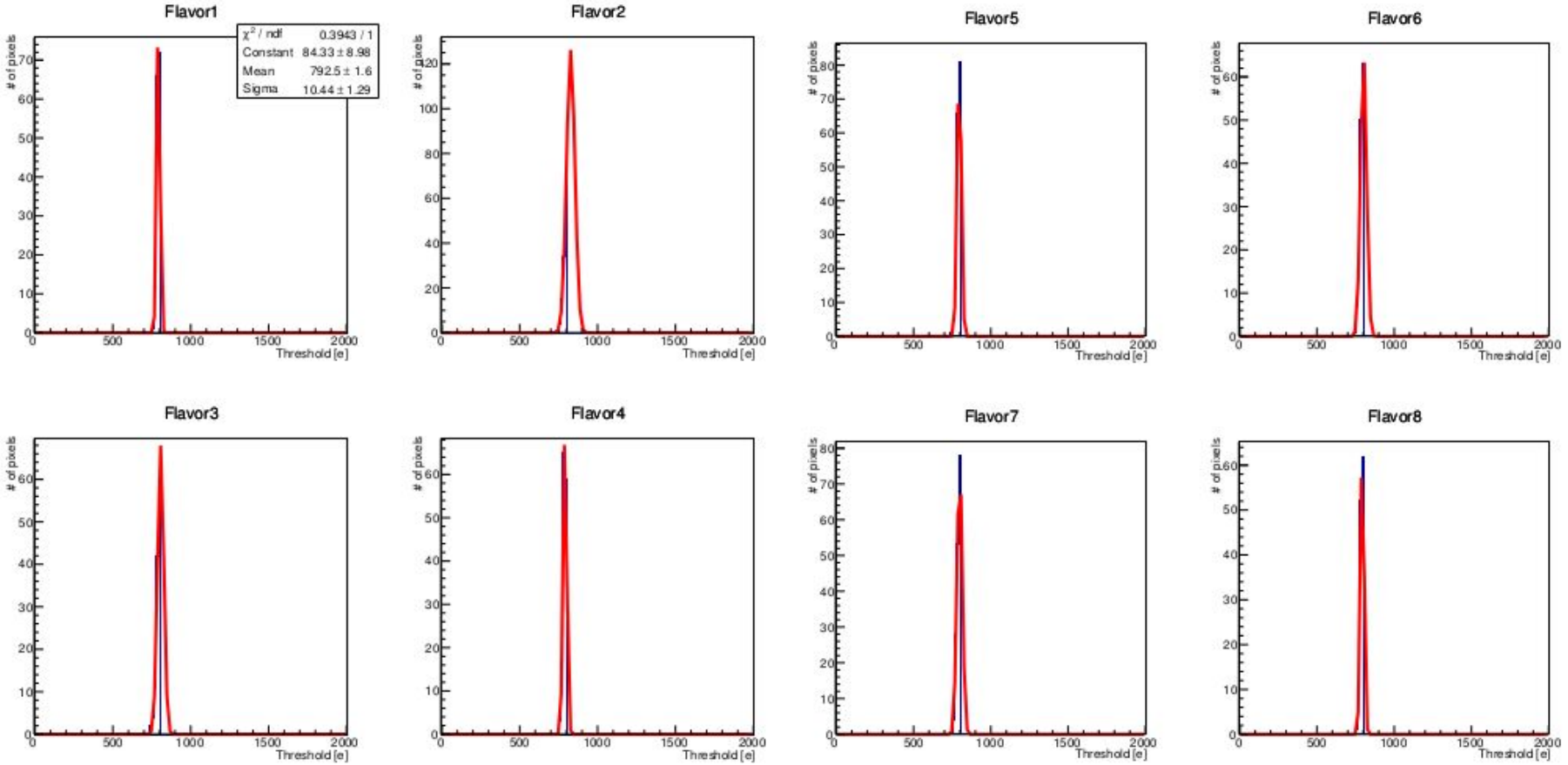
$$\delta Disp_{cor} = \delta M^2 + \delta k^2$$

Corrected Dispersion: Column Flavor 4 (RH + LCC)

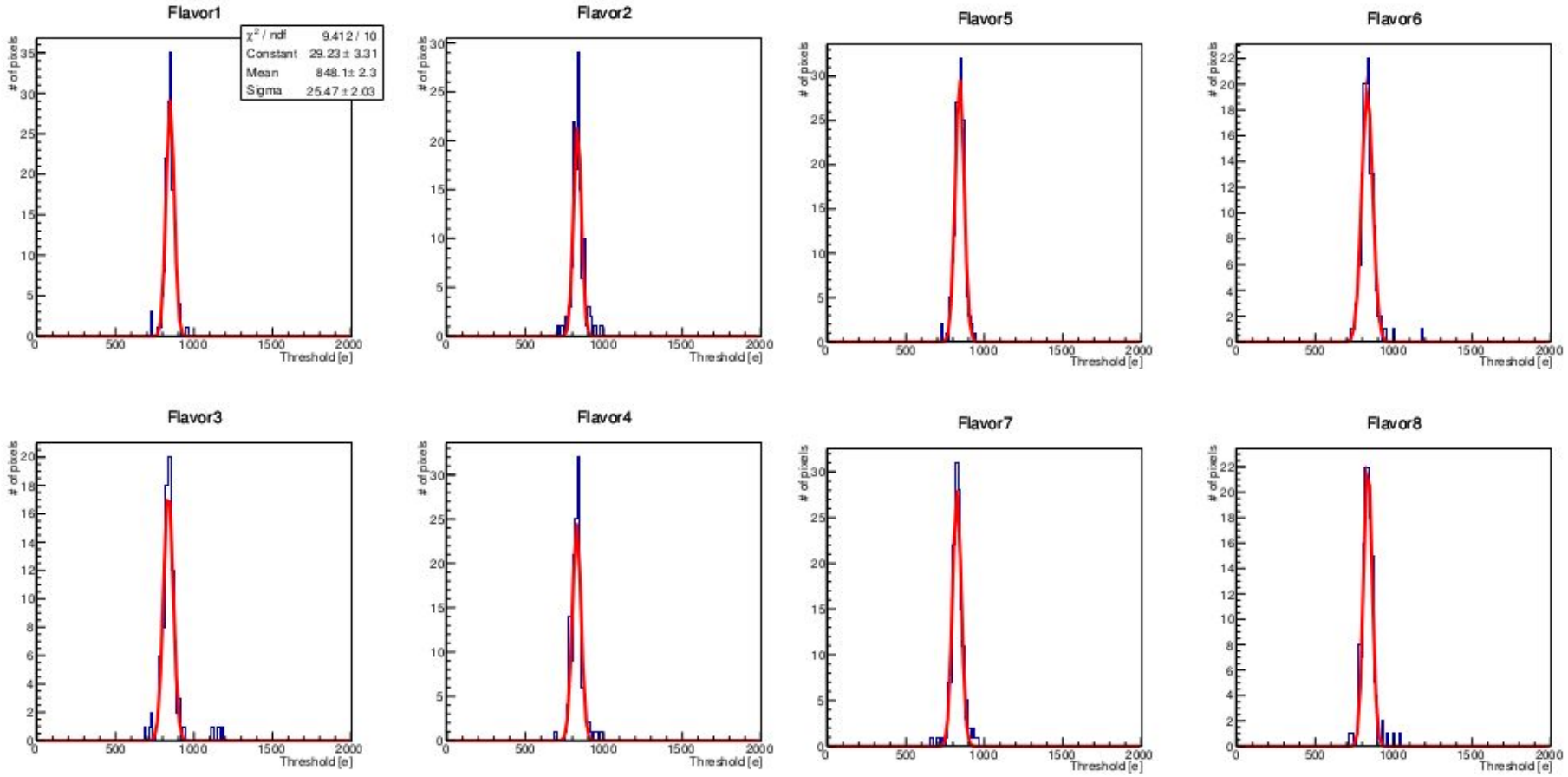


$$Disp_{cor} = \sqrt{M^2 - (k\Delta T)^2}$$

150 Mrad Chip Irradiation: 0 krad (Tuning)



150 Mrad Chip Irradiation: 1600 krad



- Get rate of dispersion for the corrected data + error
- Apply method to Threshold Mean Shift and 350 Mrad data
- Compile results for ICHEP 2016 proceedings due Nov 11th